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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,829	09/05/2003	Hidehiko Sekizawa	S1459.70062US00	8415

7590 05/25/2006
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EXAMINER

CHANG, AUDREY Y

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,829

Applicant(s)

SEKIZAWA ET AL.

Examiner

Audrey Y. Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37.CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **March 27, 2006** has been entered.
2. This Office Action is in response to applicant's amendment filed on **March 27, 2006**, which has been entered into the file.
3. By this amendment, the applicant has amended claims 1-3, 5-7 and 9, has canceled claims 4 and 8 and has newly added claims 10-13.
4. Claims 1-3, 5-7 and 9-13 remain pending in this application.
5. The rejections to claims 1-9 under 35 USC 112, first paragraph set forth in the previous Office Action are **withdrawn** in response to applicant's amendment.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3, 5, 7-9 and newly added claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to PCT publication by Rosencwaig (WO 95/00872).**

Rosencwaig teaches a *polarizing eyeglasses* having a pair of lenses (140, and 146, Figure 4), that is used in *stereoscopic vision system* having an *image display screen* (130) that is compressed of plurality of pixels (126 and 128) that alternatively displaying parallax image information for right eye (pixels 126) and left eye (pixels 128) respectively. Rosencwaig teaches that the stereoscopic vision system further comprises a *polarizing plate* (132) placed in front of the display screen and a *birefringent retarder* (134) serves as the *phase difference plate* placed in front of the polarizing plate at the *positions* corresponding to the pixels element of (126), that are the pixel elements for displaying image information intended only for one eye, (such as right eye). The birefringent retarder (134) or the phase difference plate has the function of *rotating* or *changing* the polarization direction of the image light from pixel elements (126) by 90 degrees. Rosencwaig teaches that the polarizing eyeglass is worn by the observer to enable stereoscopic viewing, (which means that only right eye image light reaches right eye and only left eye image light reaches left eye). The polarizing eyeglasses comprises two lenses (140 and 146) that includes a *polarizer* (144 and 148) serves as the *polarized light separating means* that will only allow image light having the corrected polarization state to pass. The polarizing eyeglasses further comprises a *birefringent retarder* (142), placed at the first face of the polarized light separating means, serves as the *first polarization direction changing means* to change the polarization direction of the image light intended for the left eye so that the image light has the same polarization direction as compared to the polarized light separating means, (please see Figure 4, the abstract and pages 7-9). The polarizing eyeglass therefore allows only the right eye image light to reach the right eye and the left eye image light to reach left eye. Rosencwaig teaches that the polarization state of the polarizing plate (132) and the polarization state of the polarizing plate (144 and 146) are orthogonal to each other.

It is implicitly true that one can chose the polarization state of the polarizing plate (132) to be any polarization state such as S state or P state, and if the polarizing plate (132) takes the polarization state S it will provide a first type or second type of display and if it takes the polarization state P it will be a third

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type or a fourth type of the display. Similarly, judging from Figure 4 of Rosencwaig, one skilled in the art would know that the birefringence retarder (134) or phase difference plates may be placed either at first area or the second area (126 or 128) of the display panel with the polarization direction changing means or birefringence retarder (142) be placed between the display panel and the polarizing plate or polarization separation means (144 or 148) being placed at the second or first viewing region of the polarizing eyeglass device to make the second or fourth types of the display.

This reference has met all the limitations of the claims with the exception that it does not teach explicitly to include a second polarization direction changing means that is placed at *opposite face* of the polarized light separating means. However the claims **fail** to provide logical relationship as how does the second polarization direction changing means cooperate with other elements in the claims to make the device operable or different in operation. In fact, person with knowledge in the art would know that the second polarization direction changing means is a **redundant** element, that does not effect the workability of the apparatus as stated in claims 1 and 5. Even the applicant of the instant application admitted the second polarization direction changing means does not effect the viewing of the image and the function of the apparatus, (please see the specification). Since the second polarization direction changing means DOES NOT effect the function of the polarizing eyeglasses in viewing the stereoscopic vision, it would have been obvious to one skilled in the art to know that by adding a **redundant** piece of element to the device does not makes any patentable difference to the prior art.

With regard to claims 3, 7, 11 and 13, it is implicitly true that the polarizing eyeglasses could be changed between the different arrangements by some sort of "reversing mechanism".

8. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over PCT publication of Rosencwaig as applied to claims 1 and 5 above, and further in view of the patent issued to Matsuda (PN. 4,989,967).

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The polarizing eyeglasses utilized in a stereoscopic vision system taught by **Rosencwaig** as described for claims 1 and 5 above has met all the limitations of the claims. This reference however does not teach explicitly to use a pair of protective layers to cover the polarized light separation means and the polarization direction changing means. However it is very common knowledge in the art to use protective layer to cover the lenses of the eyeglasses as demonstrated by the teachings of **Matsuda** wherein a **protective layer** (1a, Figures 1b and 4) is used to coat the lens element. It would then have been obvious to one skilled in the art to use protective layers to coat the polarizing eyeglasses for the benefit of protecting it from environmental damages.

Response to Arguments

9. Applicant's arguments filed on March 27, 2006 have been fully considered but they are not persuasive. The amendments to the claims have been fully considered and are rejected for the reason stated above.

Allowable Subject Matter

10. The following is a statement of reasons for the indication of allowable subject matter: of the prior art references considered none has disclosed a polarizing eyeglass device adaptable for use with a **first** type and **third** type of stereoscopic image display apparatus with the detailed arrangements set forth in the claims, and the polarizing eyeglass device having a **first** and **second** arrangements with the details set forth in the claims such that by *reversing* the eyeglass device *between* **first** and **second** arrangements and by *switching* the image display apparatus between the **first** and **third** type display apparatus the stereoscopic image viewing can be preserved. Similarly, a polarizing eyeglass device adaptable for use with a **second** type and **fourth** type of stereoscopic image display apparatus with the detailed arrangements set forth in the claims, and the polarizing eyeglass device having a **third** and **fourth**

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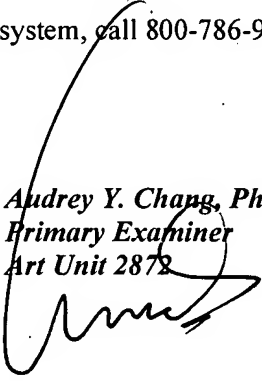
arrangements with the details set forth in the claims such that by *reversing* the eyeglass device *between* **third** and **fourth** arrangements and by *switching* the image display apparatus between the **second** and **fourth** type display apparatus the stereoscopic image viewing can be preserved.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Audrey Y. Chang, Ph.D.
Primary Examiner
Art Unit 2872



A. Chang, Ph.D.